IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re:	Serial No.:	10/565,229	Conf. No.: 9930
	Applicant:	**Martin BRODT et al.**	
	Filed:	January 20, 2006	
	Title:	**PRESS-HARDENED COMPONENT AND PROCESS FOR PRODUCING A PRESS-HARDENED COMPONENT**	
	Art Unit:	3726	
	Examiner:	Essama OMGBA	
	Atty Docket No.:	913.1001	
	Customer No.:	23280	

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

December 17, 2010

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Rejection dated August 23, 2010 in this application. The statutory fee of $270.00 for a small entity filing an appeal brief was paid with the Appeal Brief filed June 9, 2010. If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

REAL PARTY IN INTEREST

The real party in interest is Z.A.T. Zinc Anticorosion Technologies SA, a corporation having a place of business in Pully, Switzerland.

I. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal, interference or judicial proceeding that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

II. STATUS OF CLAIMS

Claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 are pending. Claims 1 to 9, 13, 14, 22, 23, 29 and 30 have been canceled. Claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 have been finally rejected by the Examiner as per the Final Office Action dated December 23, 2009 and were most recently rejected as per the Office Action dated August 23, 2010.

The rejection of claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 thus is appealed. A copy of pending claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 is attached hereto as Appendix A.

III. STATUS OF AMENDMENTS

No amendments were filed after the rejection of claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 in the Office Action dated August 23, 2010. A Notice of Appeal was filed on October 13, 2010 and received by the U.S.P.T.O. on October 18, 2010.

IV. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 10 recites a process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet (e.g., press-hardened component 1 in Fig. 1f and semi-finished product 2 in Figs. 1a and 2a; page 5, lines 9 to 11 and 21, paragraphs [0024] and [0025]), the process comprising: forming a component blank from the steel semi-finished product using a cold-forming process (e.g., component blank 10 in Figs. 1b and 2b; page 6, lines 16 to 19, paragraph [0027]), the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge (e.g., margin contour 12 and margin regions 11 in Figs. 2a and 2b; page 6, lines 19 to 27, paragraph [0027]); trimming the component blank at the margin edge to the margin contour (e.g., Fig. 1b and 2c; page 6, line 30 to page 7, line 4, paragraph [0028]); heating and press-hardening the trimmed component blank using a hot-forming tool (e.g., hot-forming tool 23 in Fig. 1d; page 7, line 23 to page 8, line 22, paragraph [0032] to [0033]); and covering the press-hardened component blank with a corrosion-prevention layer in a coating step (e.g., Fig. 1f; page 9, lines 9 to 11, paragraph [0036]), wherein the coating step includes a thermal diffusion process (e.g., page 9, lines 11 to 20, paragraph [0036]).

Independent claim 20 recites a process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet (e.g., press-hardened component 1 in Fig. 3e and semi-finished product 2 in Figs. 2a and 3a; page 10, lines 11 to 14, paragraph [0040]), the process comprising: heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank (e.g., component blanket 10' and hot-forming tool 23' in Fig. 3b; page 10, lines 15 to 22, paragraph [0040]), having a margin contour corresponding approximately to the press-hardened component and a margin edge (e.g., margin contour 12 and margin regions 11 in Figs. 2a and 2b; page 6, lines 19 to 27, paragraph [0027]); trimming the press-hardened component blank at the margin edge to the margin contour (Fig. 3c; page 10, lines 24 to 27, paragraph [0041]); covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step (e.g., Fig. 3c; page 9, lines 9 to 11, paragraph [0036]; page 10, lines 27 to 30, paragraph [0041]), wherein the coating step includes a thermal diffusion process (e.g., page 9, lines 11 to 20,

paragraph [0036]).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 31, 33, 35, 37 and 38 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 10 to 12, 16 to 21 and 25 to 28 and 31 to 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of Kefferstein et al. (U.S. Patent 6,564,604) and Kirk (U.S. Patent 1,552,059). Claims 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Kefferstein et al., Kirk and Warichet et al. (U.S. Patent 6,921,439).

VII. ARGUMENTS

A. Rejections under 35 U.S.C. 112, Second Paragraph

Claims 31, 33, 35, 37 and 38 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The Examiner alleges that claims 31, 33, 35, 37 and 38 are indefinite because it is not clear what heating rate unit is recited in the claims.

As evidenced by the Examiner's statement in the Office Action of August 23, 2010 that K/min is assumed to be Kelvin/min it is respectfully submitted that one of skill in the art would have clearly understood that K/min stands for Kelvin per minute and thus claims 31, 33, 35, 37 and 38 are clear and definite. K is the universal symbol for the temperature unit of Kelvin and, because this symbol is well known to those of ordinary skill in the art, a heating rate described in "K/min" is clear to one of skill in the art.

Based on the foregoing, reversal of the rejection under 35 U.S.C. 112, second paragraph, of claims 31, 33, 35, 37 and 38 is respectfully requested.

B. Rejections under 35 U.S.C. 103(a): AAPA, Kefferstein et al. and Kirk

Claims 10 to 12, 16 to 21 and 25 to 28 and 31 to 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of Kefferstein et al. (U.S. Patent 6,564,604) and Kirk (U.S. Patent 1,552,059).

AAPA is disclosed in the specification at [0001] to [0004].

Kefferstein et al. discloses that conventionally "steel sheets intended for high temperature forming and/or heat treatment are not delivered with a coating in view of the retention of the coating during the heat treatment, as steels are generally heat treated at relatively high temperatures, far in excess of 700 degrees C. Indeed, zinc coating deposited on a metallic surface was considered heretofore as likely to melt, flow, foul the hot forming tools during the heat treatment at temperatures in excess of the zinc melting temperature, and degrade during quenching. Therefore, the coating is applied on the finished part, which necessitates careful cleaning of the surfaces and hollow areas." (Kefferstein et al., col. 1, lines 13 to 24). Kefferstein

et al. then suggests that "contrary to preconceived ideas, during heat treatment or temperature rise for hot forming, the coating forms a layer alloying with the steel of the strip and presents then a mechanical resistance such that it prevents the coating material from melting. The resulting compound presents high resistance to corrosion, abrasion, wear and fatigue. The coating does not alter the steel formability properties, thus allowing a wide range of cold and hot forming operations." (Id., col. 2, lines 52 to 59).

Kirk discloses a sherardizing apparatus for sherardizing pipe couplings, castings, nails, wire and other metal articles with zinc dust. (Page 1, left column, lines 10 to 17).

1. Independent Claims 10 and 20

Claim 10 recites "[a] process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

forming a component blank from the steel semi-finished product using a cold-forming process, the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge;

trimming the component blank at the margin edge to the margin contour;

heating and press-hardening the trimmed component blank using a hot-forming tool; and

covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process."

Claim 20 recites "[a] process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank, having a margin contour corresponding approximately to the press-hardened component and a margin edge;

trimming the press-hardened component blank at the margin edge to the margin contour;

covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process."

None of the cited references, alone or in combination, discloses the step of "covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the

coating step includes a thermal diffusion process" as recited in claim 10 or "covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process" of claims 10 and 20. AAPA discloses that a strip coating to prevent corrosion is customarily applied **before** "the heating and press-hardening" and "trimming" steps of claims 10 and 20. (Present specification, paragraph [0004]). Kefferstein et al. discloses that it is known to post-treat parts formed from steel sheets, but in no way teaches or suggests that the steel sheets are **trimmed before coating**. The only trimming in Kefferstein et al. is done after hot-forming and coating. (e.g., Kefferstein et al., col. 1, line 66 to col. 2, line 13). Kirk also does not cure this deficiency because Kirk merely describes an apparatus for sherardizing pipe couplings, castings, nails, wire and other metal articles with zinc dust, but does not disclose sherardizing **press-hardened, trimmed component blanks** formed from steel sheets as required by claims 10 and 20 or provide any reason to modify the methods of AAPA or Kefferstein et al. in such a manner. (Col., lines 19 to 21). Thus, none of the references discloses the "covering" steps of claims 10 and 20.

Furthermore, one of skill in the art would not have modified the method of AAPA in view of Kefferstein et al. in the manner alleged by the Examiner. The Examiner acknowledges that AAPA does not teach covering a press-hardened component blank with a corrosion-preventing layer in a coating step and alleges that Kefferstein et al. cures this deficiency by disclosing that it is known to post-treat parts formed from steel sheets. However, the invention in Kefferstein et al. is directed towards pre-coating coat steel sheet blanks before heat treatment and Kefferstein et al. goes in detail about the considerable disadvantages of post-treatment of parts formed from steel sheets, thus clearly teaching away from post-treatment to increase corrosion resistance. After stating that steel sheets intended for high temperature forming and/or heat treatment are not pre-coated with zinc because the zinc is likely to melt, Kefferstein et al. describes a laundry list of major deficiencies related to post-treatment and failing to coat steel sheet blanks with zinc before heat treatment. Kefferstein et al. does not merely describe conventional post-treatment technique as a less preferable alternative. Instead, by describing such post-treatment as entailing "significant financial costs and risks for operators and the environment," diminishing "the dimensional and aesthetic quality of the parts produced or requir[ing] frequent and costly tool repairs," being "costly," being "difficult or even impossible"

and "creating risks of fragilization," Kefferstein et al. would clearly have lead one of skill in the art at the time of the invention in a direction divergent from such a conventional post-treatment process. (Col. 1, lines 22 to 41). Kefferstein et al. then goes on to describe the advantages of applying a zinc covering before hot-forming, cold-forming or heat treating. (See, e.g., col. 1, lines 42 to 55; col. 2, lines 26 to 32). Thus, one of skill in the art, considering the disclosure of Kefferstein et al. as a whole, would have coated a steel sheet with zinc before hot-forming, cold-forming or heat treatment and would be lead away from "covering the press-hardened component blank with a corrosion-prevention layer in a coating step" recited in claim 10 or "covering the press-hardened, trimmed component blank with a corrosion-prevention layer" recited in claim 20.

Additionally, it is respectfully submitted that one of skill in the art would not have modified the methods of AAPA or Kefferstein et al. in view of Kirk in the manner alleged by the Examiner. AAPA teaches that customarily a strip coating is applied to steel material before pre-coating and Kefferstein et al. teaches applying a zinc covering before hot-forming, cold-forming or heat treating and then manipulating the coating during the forming and heat treatment processes. Kirk teaches sherardizing pipe couplings, castings, nails, wire and other metal articles with zinc dust. The Examiner alleges that "it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a thermal diffusion process to coat the press-hardened component blank of AAPA/Kefferstein et al. with a Zinc corrosion-preventing layer, as taught by Kirk, as known in the art." Kirk merely describes sherardizing small metal articles, without mentioning at which stage in production of the small metal articles are sherardized, and does not in any way indicate applying the sherardizing technique disclosed therein to a press-hardened, trimmed component blank or a component black formed from a steel sheet.

Based on the foregoing, it is respectfully submitted that, there is no reason why, at the time of the present invention, it would have been obvious to one of skill in the art to have applied the thermal diffusion method of Kirk to a **press-hardened, trimmed component blank** formed from a steel sheet and it is respectfully submitted that the Examiner's reasoning for combining the references is conclusory and is not sufficiently articulated to support a prima facie case of

obviousness. The Examiner completely ignores the fact that none of the references teaches coating a press-hardened, component blank after the blank has been trimmed or teaches thermal diffusion coating of a component blank formed from a steel sheet. Thus, it is respectfully submitted that the Examiner clearly is not viewing claims 10 and 20 as a whole, but is simply piecing together prior art references in an effort to meet the limitations of the claims, without any reason have a rational underpinning. (See MPEP 2142; *KSR Int'l Co. v. Teleflex Inc.*, 383 127 S. Ct. 1727, 1740-41 (2007) ("[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.")).

Reversal of the rejections under 35 U.S.C. §103(a) to claim 10, along with claims 11, 12, 16 to 19 and 30 to 32 depending therefrom, and claim 20, along with claims 21 to 29, 33 and 34 depending therefrom, is respectfully requested.

2. Independent Claim 10: Argued Separately

With further respect to claim 10, it is also respectfully submitted that none of the cited references or the AAPA disclose "trimming the component blank at the margin edge to the margin contour" **before** the blank is "heat[ed] and press-harden[ed]" as required by claim 10 and the Examiner is in clear error for failing to address the specific language of the "trimming" step of claim 10. The Examiner relies on AAPA, specifically the discussion of DE 101 49 221 (also published as U.S. 2003/0066582 A1) at paragraph [0004] of the present application, as disclosing the "trimming" step of claim 10. In DE 101 49 221, a blank is pre-formed and pre-cut prior to hot forming, but the blanket is not trimmed "at the margin edge to the margin contour" as recited in claim 10 until the final contour is provided after hot forming. **Thus, the trimming discussed in DE 101 49 221 at paragraph [0004] of the present specification is not the "trimming" step required by claim 10**. Claim 7 of U.S. 2003/0066582 A1 clearly illustrates that this pre-cutting trimming is different from the "trimming" step required by claim 10 in the present application. (See U.S. 2003/0066582 A1, claim 7 ("The method of claim 1, and further comprising the step of cutting the sheet metal article in a post-operation.")). Furthermore, because neither Kefferstein et al. nor Kirk cures this deficiency of AAPA, "trimming the component blank at the margin edge to the margin contour" **before** the blank is "heat[ed] and

press-harden[ed]" as recited claim 10 would not have been obvious to one of skill in the art at the time of the present invention in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. 103(a) of claim 10 is respectfully requested.

3. Dependent claims 31 to 35 and 37: Argued Separately

Claims 31, 32 and 35 are dependent on claim 10 and claims 33, 34 and 37 are dependent on claim 20.

Claims 31 and 33 recite "wherein the thermal diffusion process including heating the component at 5 to 10 K/min."

Claims 32 and 34 recite "wherein the thermal diffusion process includes heating the component solely to approximately 300 degrees Celcius."

Claims 35 and 37 recites "heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating."

It is respectfully submitted that none of the cited references, alone or in combination, discloses or makes obvious "heating the component at 5 to 10 K/min" as recited in claims 31 and 33, "heating the component solely to approximately 300 degrees Celcius" as recited in claims 32 and 34 or "heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating" as recited in claims 35 and 37. In rejecting claims 31 to 38 in the Office Action of August 23, 2010, at page 4, the Examiner states:

> For claims 31-38, Kirk teaches placing the components into a drum, closing the drum and gradually heating the components and controlling the temperature inside the drum in order to properly coat the component while giving the component a desirable heat treatment., see page 1, lines 30-55 and page 2, lines 9-61. Therefore it would have been obvious to one of skill in the art at the time the invention was made to have heated the component of AAPA/Kefferstein et al. at the claimed heating rate and temperature, in light of the teachings of Kirk, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

It is respectfully submitted that the Examiner's finding of obviousness with respect to claims 31

to 35 and 37 is conclusory and is not supported by sufficient articulated reasoning. (See MPEP 2142: *KSR International Co. v. Teleflex Inc.*, 383 127 S. Ct. 1727, 1740-41 (2007): "[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.") The Examiner completely fails to address the language of claims 31 to 35 and 37 or provide any articulated reasoning or evidence to support the Examiner's apparent (but not even articulated) conclusion that "heating the component at 5 to 10 K/min" as recited in claims 31 and 33, "heating the component solely to approximately 300 degrees Celcius" as recited in claims 32 and 34 or "heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating" as recited in claims 35 and 37 would have been obvious to one of ordinary skill in the art at the time of the present invention. Additionally, it is respectfully submitted that the Examiner's reliance on *In re Aller* is misplaced with respect to claims 31 to 35 and 37. The Examiner is correct that *In re Aller* stands for the general proposition that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. However, unlike in *In re Aller*, Kirk does not disclose any conditions related to the heating rate or the maximum temperature, especially with respect to heating a press-hardened, trimmed component blank formed from a steel sheet, and thus cannot be characterized as disclosing the general conditions of claims 31 to 35 and 37. (See MPEP 2144.05: *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) (Claimed process which was performed at a temperature between 40°C and 80°C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100°C and an acid concentration of 10%.)

For these additional reasons, reversal of the rejection under 35 U.S.C. 103(a) of claims 31 to 35 and 37 is respectfully requested.

4. Dependent claims 36 and 38: Argued Separately

Claim 36 recites "[t]he process as recited in claim 35 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and cooling the drum in a cooling station."

Claim 38 recites "[t]he process as recited in claim 37 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and conditioning the drum and the press-hardened, trimmed component blanks at a temperature of approximately 200 degrees Celsius for approximately one hour."

It is respectfully submitted that none of the cited references discloses or makes obvious "cooling the drum in a cooling station" as recited in claim 36 or "conditioning the drum and the press-hardened, trimmed component blanks at a temperature of approximately 200 degrees Celsius for approximately one hour" as recited in claim 38 and the Examiner is in clear error for failing to even attempt to explain or provide evidence showing such limitations would have been obvious to one of ordinary skill in the art at the time of the present invention.

For these additional reasons, reversal of the rejection under 35 U.S.C. 103(a) of claims 36 and 38 is respectfully requested.

C. Rejections under 35 U.S.C. §103(a): AAPA, Kefferstein et al., Kirk and Warichet et al.

Claims 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Kefferstein et al., Kirk and Warichet et al. (U.S. Patent 6,921,439).

Claim 15 is dependent on claim 10 and claim 24 is dependent on claim 20. In view of the above arguments with respect to claims 10 and 20, reversal of the rejection under 35 U.S.C. 103(a) of claims 15 and 24 is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this appeal brief is respectfully requested.

Respectfully submitted,

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APPENDIX A:

PENDING CLAIMS 10 to 12, 15 to 21, 24 to 28 and 31 to 38 of
U.S. APPLICATION SERIAL NO. 10/565,229

Claim 10 (previously presented): A process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

forming a component blank from the steel semi-finished product using a cold-forming process, the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge;

trimming the component blank at the margin edge to the margin contour;

heating and press-hardening the trimmed component blank using a hot-forming tool; and

covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process.

Claim 11 (previously presented): The process as recited in claim 10, wherein the press-hardened component is a bodywork component.

Claim 12 (previously presented): The process as recited in claim 10, wherein the cold-forming process includes a drawing process.

Claim 15 (previously presented): The process as recited in claim 10, further comprising cleaning the press-hardened component blank by dry cleaning prior to the coating step.

Claim 16 (previously presented): The process as recited in claim 10, further comprising blasting

the press-hardened component blank with particles prior to the coating step.

Claim 17 (previously presented): The process as recited in claim 16, wherein the particles include glass particles.

Claim 18 (previously presented): The process as recited in claim 10, further comprising removing residues from the coating step from the coated component blank after the coating step.

Claim 19 (previously presented): The process as recited in claim 10, further comprising conditioning the coated component blank after the coating step.

Claim 20 (previously presented): A process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank, having a margin contour corresponding approximately to the press-hardened component and a margin edge;

trimming the press-hardened component blank at the margin edge to the margin contour;

covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process.

Claim 21 (previously presented): The process as recited in claim 20, wherein the press-hardened component is a bodywork component.

Claim 24 (previously presented): The process as recited in claim 20, further comprising cleaning the press-hardened component blank by dry cleaning prior to the coating step.

Claim 25 (previously presented): The process as recited in claim 20, further comprising blasting the press-hardened component blank with particles prior to the coating step.

Claim 26 (previously presented): The process as recited in claim 25, wherein the particles include glass particles.

Claim 27 (previously presented): The process as recited in claim 20, further comprising removing residues from the coating step from the coated component blank after the coating step.

Claim 28 (previously presented): The process as recited in claim 20, further comprising conditioning the coated component blank after the coating step.

Claim 31 (previously presented): The process as recited in claim 10 wherein the thermal diffusion process including heating the component at 5 to 10 K/min.

Claim 32 (previously presented): The process as recited in claim 10 wherein the thermal diffusion process includes heating the component solely to approximately 300 degrees Celcius.

Claim 33 (previously presented): The process as recited in claim 20 wherein the thermal diffusion process including heating the component at 5 to 10 K/min.

Claim 34 (previously presented): The process as recited in claim 20 wherein the thermal diffusion process includes heating the component solely to approximately 300 degrees Celcius.

Claim 35 (previously presented): The process as recited in claim 10 wherein the thermal diffusion process includes the steps of:

placing the press-hardened, trimmed component blank, a plurality of other press-hardened, trimmed component blanks and a zinc-containing powder into a drum and closing the drum;

introducing the drum to a coating installation; and

heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating.

Claim 36 (previously presented): The process as recited in claim 35 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and cooling the drum in a cooling station.

Claim 37 (previously presented): The process as recited in claim 20 wherein the thermal diffusion process includes the steps of:

placing the press-hardened, trimmed component blank, a plurality of other press-hardened, trimmed component blanks and a zinc-containing powder into a drum and closing the drum;

introducing the drum to a coating installation; and

heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating.

Claim 38 (previously presented): The process as recited in claim 37 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and conditioning the drum and the press-hardened, trimmed component blanks at a temperature of approximately 200 degrees Celsius for approximately one hour.

APPENDIX B

Evidence Appendix under 37 C.F.R. §41.37 (c) (ix):

No evidence pursuant to 37 C.F.R. §§1.130, 1.131 or 1.132 and relied upon in the appeal has been submitted by appellants or entered by the examiner.

APPENDIX C

Related proceedings appendix under 37 C.F.R. §41.37 (c) (x):

As stated in "2. RELATED APPEALS AND INTERFERENCES" of this appeal brief, appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.